

Mayor's Column for January 27, 2010 Review

In December 2007 the Common Council unanimously passed Resolution #2007-50, implementing a community-wide energy program. The resolution stated that the City of Evansville and Evansville Water & Light were “dedicated to improving global and local quality of life through active environmental stewardship”.

Also included in the resolution was the statement that the City and Water & Light would “create a utility-wide effort to instill a conservation ethic, demonstrate the effectiveness of energy efficiency, conservation and renewable resource development and help establish the community as a leader in these areas”. It sets a community goal of reducing demand for electricity, water, and natural gas by 10%. The resolution includes a commitment by the City and Water & Light to “lead by example” and adopt a policy to curb energy use in municipally-owned facilities.

I remember discussion by the Council on the difficulty of developing benchmark measurements from which to determine energy use reductions. Timelines for completion of goals were not included in the resolution because of the identified issue of establishing a baseline.

In March of 2008 I was invited to a meeting at the new Wisconsin Office of Energy Independence (OEI) in Madison. For 90 minutes I met privately with Judy Ziewacz, Director of OEI, and Brian Driscoll, Community Relations Director of OEI. Judy had previously worked in the Wisconsin Department of Agriculture, Trade and Consumer Protection. Brian had worked in Governor Doyle’s office until his new assignment. They were both familiar with Evansville’s energy-related activities.

OEI recognized that successful state energy independence would depend on local, grass-roots energy activities in many communities. They asked Evansville to become one of the first Wisconsin Energy Independent Communities. They inquired about the details of many Evansville energy activities. I mentioned the Council discussion regarding analysis of municipal energy use/costs and its importance in determining future energy savings.

I was excited when OEI announced the pilot 25 x 25 planning grant program late in 2008. Evansville was successful in receiving a \$50,000 grant, one of ten grants awarded. The first step in drafting the plan to develop/obtain 25% of electricity and transportation fuel from renewable sources by 2025 was determining baseline use in municipal buildings, fleet vehicles, and infrastructure. We have recently completed the grant requirements.

Early last year, energy data, electricity and fuel use and costs, were gathered for all municipal buildings, city-owned vehicles, outdoor lighting, and water treatment. The information was entered into spreadsheets provided by the Energy Center of Wisconsin. The Energy Center calculated 2008 baseline information from the data we supplied.

Evansville municipal consumption in 2008 was 42% electricity (1,551,949 kWh), 34 % gasoline (23,160 gallons) and diesel fuel (9,985 gallons), 22% natural gas (27,730

therms), and 1% propane (1,573 gallons). The energy used was 33% for buildings, 34% for vehicles, 9% for outdoor lighting, and 24% for water treatment.

Total annual municipal energy costs in 2008 were \$333,427. The total included \$69,143 for building energy, \$149,741 for outdoor lighting and water treatment, and \$114,543 for vehicle fuel. 2008 municipal operating expenses were \$2,704,862 according to the city audit by Johnson and Block. In 2008, 12.3% of city expenses were for energy.

The grant required that a local energy independence team be established to gather and analyze the baseline information, draft the 25 x 25 plan, and promote local energy awareness. The annual energy costs incurred by the city were a surprise to the team. While costs were in the city budget by department, costs had not been aggregated to understand its impact on the budget. With tight municipal budgets for the foreseeable future, selected energy efficiency, energy conservation and renewable projects can also substantially reduce energy costs, certain to be of interest to our citizens.

A valuable benefit of the pilot grant program was the ability to share information and ideas with the other grant communities. Evansville had the highest percentage of energy use from vehicles. The City of Oconomowoc had 32% of energy use from vehicles; other communities were substantially lower. This suggests that vehicle use may be an area to look for energy savings.

We found some areas where improvements can be made in recording energy data. Some of our city buildings or lights were not metered, while other meters were measuring multiple facilities/lights. Some individual vehicle fuel usage information was not complete. Better energy tracking will occur going forward.

We will be entering the baseline energy information into the Energy Star Portfolio Manager, a software program of the U.S. Environmental Protection Agency. As we undertake conservation and efficiency improvements we will be able to track the results.

Here are some of the projects that can reduce costs for the city. An analysis of existing street light energy use/costs by the Energy Center indicates that if we upgraded 320 non-historic style street lights to LED technology, we would save 111,938 kWh annually, with an energy cost savings exceeding \$11,000 in the city operating budget each year. We have applied for an Energy Efficiency Community Block Grant in the amount of \$189,143, with no local matching fund requirement, for purchase and installation of LED street lights manufactured by Ruud Lighting, a Racine, Wisconsin company.

We have analyzed a lighting upgrade for the Public Works garage. Installation of 41 energy-efficient fluorescent fixtures and 20 solar light pipes (off-the-grid solar light collectors) would save 38,666 kWh annually, a yearly energy cost savings of approximately \$4,000. The lights for this project would be purchased from Orion, a Manitowoc, Wisconsin lighting company. \$25,267 has also been included in our Block Grant application for this project, again with no local match.

This spring, the city will undertake a detailed energy audit of all municipal facilities. WPPI Energy developed an energy management planning and implementation guide for municipalities that will be used. Information on use and maintenance in lighting, HVAC, office equipment, refrigeration, and hot water will be gathered and analyzed for future efficiency and conservation improvements.

Already undertaken was the installation of new energy-efficient lights as part of the recent remodeling of the old fire station for the police department relocation and the construction of the police/EMS garage. \$1,290 in lighting fixture rebates were received from Wisconsin Focus on Energy.

In future columns, I will discuss other municipal projects identified in developing the 25 x 25 plan and the reduction in carbon dioxide generation by those energy activities. Energy-saving projects in the community are already in process. Larson Acres is working with WPPI Energy on energy-efficient lighting and chiller projects as part of their dairy expansion. The Evansville Community School District will undertake energy audits through participation in WPPI Energy's Energy Management for Schools program. Progress towards the energy goal identified in the 2007 community-wide energy program resolution is occurring.

COMMUNITY ANNOUNCEMENTS

Evansville Water & Light residential customers are eligible for Energy Star appliance rebates, which are administered by Wisconsin Focus on Energy. Specific appliance eligibility and requirements, as well as rebate applications, are available on the Focus on Energy website at www.focusonenergy.com.

The Evansville Fund's Seventh Annual Chocolate Extravaganza will be held on Saturday, February 6, from 6:30-8:30 p.m. at the Eager Economy Building.

COMMUNITY THANKS

Evansville owes a special thanks to John Decker and Steve Culbertson of the Grove Society for spearheading the final push for restoration of the Baker Office Building located at the Leonard-Leota Park entrance on North Madison Street. Dozens of citizens, businesses, and organizations have been involved in ten years of work on this project. It is great to see the project completed.

Evansville extends heartfelt thanks to the soldiers returning from tours of duty in Iraq. Thank you for your service to our country. Welcome home!